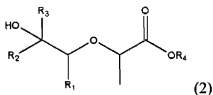


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

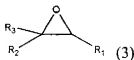
Listing of Claims:

1. (Previously presented) A method for making a compound having the formula:



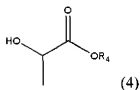
wherein R₁, R₂, R₃ are each independently H, straight or branched alkyl group, straight or branched alkenyl group, carboxyalkyl, carboxyaryl, aromatic group, aromatic-aliphatic group, alkyloxyalkyl, aryloxyalkyl, cycloalkyl, cycloalkenyl, or oxacycloalkyl, or wherein any two of R₁, R₂, and R₃ can form a ring containing 5 to 15 carbon atoms, and wherein any of R₁, R₂, or R₃ optionally contain one oxygen-functional group selected from hydroxyl, carbonyl or protected forms thereof, and wherein R₄ is a group having between 1 and 50 carbon atoms selected from the group consisting of straight or branched alkyl groups, straight or branched alkenyl groups, cycloalkyl or cycloalkenyl groups, alkyloxyalkyl groups, aromatic groups, aromatic-aliphatic groups, hydroxy-functional alkyl groups, and combinations thereof or a polymer chain comprising one or more ester or ether, or amide bonds, said method comprising:

- a) providing an epoxide of formula (3):



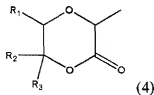
and

- b) reacting the epoxide with a lactic acid ester of formula (3):



where the epoxide and ester are in the form of separate molecules or part of the same molecule, thereby providing the compound of formula (2).

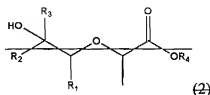
2. (Previously Presented) A method of claim 1 wherein the reaction between the epoxide and the lactic acid ester is carried out in the presence of a catalyst selected from the group comprising boron trifluoride catalysts, acid catalysts, and combinations thereof.
3. (Previously Presented) A method of claim 1 wherein the reaction between the epoxide and the lactic acid ester is carried out in the presence of excess lactic acid ester, with the molar ratio between the epoxide and the ester being between approximately 1:1.1 to 1:1000.
4. (Previously Presented) A method of claim 1 wherein the lactic acid ester is glycidyl lactate.
5. (Previously Presented) A method of claim 1 wherein the reaction between the epoxide and the lactic acid ester is conducted in the presence of a co-solvent.
6. (Currently amended) A method of ~~making a claim 1 further comprising cyclizing the compound of formula (2) to produce a~~ compound having the formula:



wherein R₁, R₂, R₃ are each independently H, straight or branched alkyl group, straight or branched alkenyl group, carboxyalkyl, carboxyaryl aromatic group, aromatic-aliphatic group, alkyloxyalkyl, aryloxyalkyl, cycloalkyl, cycloalkenyl, or oxacycloalkyl, or wherein any two

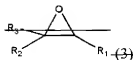
of R₁, R₂, and R₃ can form a ring containing 5 to 15 carbon atoms, and wherein any of R₁, R₂, or R₃ optionally contain one oxygen-functional group selected from hydroxyl carbonyl or protected forms thereof; said method comprising:

a) providing a 2-(2'-hydroxyethyl)propionate ester having the formula:



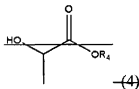
where R₄ is a group having between 1 and 50 carbon atoms selected from the group consisting of straight or branched alkyl groups, straight or branched alkenyl groups, cycloalkyl or cycloalkenyl groups, alkyloxyalkyl groups, aromatic groups, aromatic-aliphatic groups, hydroxy-functional alkyl groups, and combinations thereof; or a polymer chain comprising one or more ester or ether, or amide bonds, and b) effecting the cyclization of the 2-(2'-hydroxyethyl)propionate ester to form the compound of formula (1).

7. (Previously presented) A method as claimed in claim 6, wherein cyclization is carried out by saponifying the 2-(2'-hydroxyethyl)propionate ester of formula (2), followed by acidification.
8. (Previously presented) A method as claimed in claim 6 wherein cyclization is carried out by transesterifying the 2-(2'-hydroxyethyl)propionate ester of formula (2) in the presence of a catalyst.
9. (Previously presented) A method as claimed in claim 8 wherein cyclization is carried out by treating the 2-(2'-hydroxyethyl)propionate ester with catalyst acid or boron trifluoride to eliminate water, followed by hydrolysis of the ester and acidification.
10. (Currently amended) A method of ~~claim 6~~ claim 1 ~~wherein the compound of formula (2) comprising reacting an epoxide of formula (3):~~

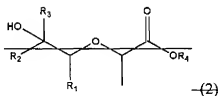


wherein R_1 , R_2 , R_3 are each independently H, straight or branched alkyl group, straight or branched alkenyl group, carboxyalkyl, carboxyaryl, aromatic group, aromatic-aliphatic group, alkyloxyalkyl, aryloxyalkyl, cycloalkyl, cycloalkenyl, or oxacycloalkyl, or wherein any two of R_1 , R_2 , and R_3 can form a ring containing 5 to 15 carbon atoms, and wherein any of R_1 , R_2 , or R_3 optionally contain one oxygen functional group selected from hydroxyl, carbonyl or protected forms thereof,

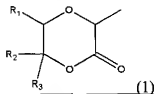
and a lactic acid ester of formula (4):



wherein R_4 is a group having between 1 and 50 carbon atoms selected from the group consisting of straight or branched alkyl groups, straight or branched alkenyl groups, cycloalkyl or cycloalkenyl groups, alkyloxyalkyl groups, aromatic groups, aromatic-aliphatic groups, hydroxy functional alkyl groups, and combinations thereof or a polymer chain comprising one or more ester or ether, or amide bonds, to form a hydroxy acid intermediate having the formula (2):



that cyclizes in situ to form the dioxanone of a compound having the formula (1) formula:

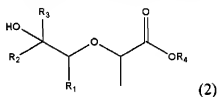


wherein R_1 , R_2 , R_3 are each independently H, straight or branched alkyl group, straight or branched alkenyl group, carboxyalkyl, carboxyaryl, aromatic group, aromatic-aliphatic group,

alkyloxyalkyl, aryloxyalkyl, cycloalkyl, cycloalkenyl, or oxacycloalkyl, or wherein any two of R₁, R₂, and R₃ can form a ring containing 5 to 15 carbon atoms, and wherein any of R₁, R₂, or R₃ optionally contain one oxygen-functional group selected from hydroxyl carbonyl or protected forms thereof.

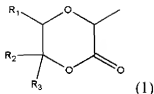
11. (Previously presented) A method as claimed in claim 6 wherein cyclization is carried out by exposing the 2-(2'-hydroxyethyl)propionate ester to an enzyme selected from the group consisting of lipases, esterases, and combinations thereof.

12. (Previously presented) A compound having the formula:



wherein R₁, R₂, R₃ are each independently H, straight or branched alkyl group, straight or branched alkenyl group, carboxyalkyl, carboxyaryl, aromatic group, aromatic-aliphatic group, alkyloxyalkyl, aryloxyalkyl, cycloalkyl, cycloalkenyl, oxacycloalkyl, or wherein any two of R₁, R₂, and R₃ form a ring containing 5 to 15 carbon atoms, and wherein any of R₁, R₂, or R₃ optionally contain one oxygen-functional group selected from hydroxyl, carbonyl or protected forms thereof, and wherein R₄ hydrogen or a group having between 1 and 50 carbon atoms selected from the group consisting of straight or branched alkyl groups, straight or branched alkenyl groups, cycloalkyl or cycloalkenyl groups, alkyloxyalkyl groups, aromatic groups, aromatic-aliphatic groups, hydroxy-functional alkyl groups, and combinations thereof, or a polymer chain comprising one or more ester or ether, or amide bonds.

13. (Currently Amended) A compound having the formula:



wherein R_1 , R_2 , R_3 are each independently H, straight or branched alkyl group, straight or branched alkenyl group, carboxyalkyl, carboxyaryl aromatic group, aromatic-aliphatic group, alkyloxyalkyl, aryloxyalkyl cycloalkyl, cycloalkenyl, oxacycloalkyl, or wherein any two of R_1 , R_2 , and R_3 form a ring containing 5 to 15 carbon atoms, and, wherein any of R_1 , R_2 , or R_3 optionally contain one oxygen-functional group selected from hydroxyl, carbonyl or protected form thereof, with the proviso that:

- a) where $R_2=R_3=H$, R_1 cannot be methyl or H,
 - b) where $R_1=R_2=H$, R_3 cannot be methyl or ethyl,
 - c) where $R_3=H$, and R_1 and R_2 form a cyclohexane or norbornene ring, at least one additional carbon atom, oxygen atom, or double bond must be present in the structure of R_1 or R_2 .
14. (Previously presented) A composition comprising a base material and an amount of a compound according to claim 13 effective to impart a fragrance or a flavor to the base material.
15. (Previously presented) A method of imparting a fragrance or a flavor to a base material comprising combining the base material with an effective amount of a compound according to claim 13.
16. – 17. (Cancelled).